

REMARKS

Applicant has studied the Final Office Action dated April 23, 2010. Claims 77, 80-82, 86, and 89-91 are currently pending in the application, claims 1-76, 78, 79, 83-85, 87, 88, and 92-94 having previously been canceled. Claims 77 and 86 are the only independent claims and have been amended in compliance with 37 CFR § 1.116(b) to more clearly claim disclosed embodiments. No new matter has been added as the foregoing amendments have support in the specification as originally filed. For example, support for the amendments to independent claims 77 and 86 can be found, at least, in FIG. 7 and related paragraphs of the specification as originally filed.

Claims 77, 80-82, 86, and 89-91 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Beckmann et al. ("Beckmann" U.S. Pat. Pub. No. 2003/0035423) in view of LG Electronics Inc, "RAN considerations on MBMS," TSG-RAN Working Group 2 Meeting #30, June, 2002 ("LG") and further in view of Sarkkinen et al. ("Sarkkinen" U.S. Pat. Pub. No. 2003/0211855) and 3GPP ("Universal Mobile Telecommunication System (UMTS); Medium Access Control (MAC) protocol specification (3GPP TS 25.321 version 5.1.0 Release 5), June 2006 ("3GPP"). Applicant respectfully traverses these rejections, and requests reconsideration and allowance of the pending claims in view of the following arguments.

Substance of Interview

As a preliminary matter, Applicant gratefully acknowledges the courtesies extended by Examiners Opiribo Georgewill and Steve D'Agosta in the May 26, 2010 personal interview with Applicants' representatives Lew Macapagal and In-Jae Lim. The Examiners' comments and explanations were helpful and very much appreciated. Pursuant to MPEP § 713.04, Applicants provide the following remarks.

Prior to the interview, the Examiners were provided with a proposed Amendment.

Claims 77 and 86 were discussed with regard to the prior art references. The Examiners noted that the new limitation "and utilized only when the MTCH is mapped onto the at least one transport channel" would appear to overcome the present rejection based on 35 U.S.C. § 103. However, the Examiners requested support for the new limitation.

In view of the discussion during the personal interview, Applicants submit amendments to the claims and provide corresponding support. The Examiner's attention to this application is gratefully acknowledged.

Objection to Specification

The Examiner objected to the specification as failing to provide proper antecedent basis for the claimed subject matter. Specifically, the Examiner asserted that claims 77 and 86 include the limitation "wherein the MBMS identifier is configured by a Radio Resource Control (RRC) layer," but there is no antecedent basis for the claimed recitation in the original specification.

It is respectfully submitted that antecedent basis for the "MBMS identifier" can be found in the phrase "wherein the first identifier is a Target Channel Type Field (TCTF) and the second identifier is a Multimedia Broadcast/Multicast Service (MBMS) identifier" (emphasis added) previously recited in claims 77 and 86 before the above identified limitation. Further, independent claims 77 and 86, as amended, recite that the second identifier is a Multimedia Broadcast/Multicast Service (MBMS) identifier configured by a Radio Resource Control (RRC) layer. Accordingly, it is respectfully requested that the objection be withdrawn.

§ 112 Rejections

The Examiner rejected claims 77, 80-82, 86, and 89-91 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner asserted that while independent claims 77 and 86 include the limitation "wherein the MBMS identifier is configured by a Radio Resource Control (RRC) layer," Applicant was not in possession of the claimed invention at the time of the filing date in view of the disclosure in the specification. Further, the Examiner invited Applicant to point to support for this limitation.

In response to the Examiner's invitation, Applicant respectfully submits that while the above identified limitation may not be explicitly disclosed in the specification as originally filed, sufficient support for the limitation can be deduced from the specification. For example, referring to FIG. 7 of the present application, the m-RNTI (MBMS identifier corresponding to the second identifier recited in independent claims 77 and 86) is generally received by a MAC-c/sh or control radio network controller (CRNC) of a UTRAN through a MAC control SAP, and the MAC control SAP is connected to the RRC layer of the UTRAN. Based on at least this

disclosure, it is respectfully submitted that support for the limitation, “the second identifier is a Multimedia Broadcast/Multicast Service (MBMS) identifier-configured by a Radio Resource Control (RRC) layer,” as recited in independent claims 77 and 86, can be found in the specification as originally filed.

Accordingly, it is respectfully asserted that the grounds for the rejections of independent claims 77 and 86 have been overcome. It is further respectfully asserted that the grounds for the rejections of claims 80-82 and 89-91 have also been overcome as those claims depend from independent claim 77 or 86.

Rejection under 35 U.S.C. § 103(a)

Claims 77, 80-82, 86, and 89-91 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Beckmann in view of LG and further in view of Sarkkinen and 3GPP.

Independent claims 77 and 86, as amended, recite that the first identifier is a Target Channel Type Field (TCTF) and the second identifier is a Multimedia Broadcast/Multicast Service (MBMS) identifier configured by a Radio Resource Control (RRC) layer, and the first identifier and the second identifier are only utilized when the MTCH is mapped onto at least one transport channel.

Applicants respectfully assert that newly added limitations are supported by FIG. 7 and paragraphs [0074], [0119] and [0120] of the published specification (US 2004/0117860). For example, paragraph [0074] of the published specification states that “TCTF indicates whether a logical channel mapped to the common transport channel is a common logical or a dedicated logical channel.” Referring to FIG. 7, if the MTCH (which is a common logical channel) is not utilized, then no common logical channel is utilized (i.e., only dedicated logical channels are utilized). Accordingly, the TCTF shown in FIG. 7 will also not be utilized because there is no need to indicate whether the logical channel is a common or dedicated channel, since all logical channels are dedicated channels. In view of this disclosure, Applicants assert that one of ordinary skill in the art can deduce that the feature of the first identifier being “only utilized when the MTCH is mapped onto at least one transport channel” of claim 1 is clearly supported by the filed specification.

Regarding the feature that the second identifier is “only utilized when the MTCH is mapped onto at least one transport channel” of claim 1, Applicants assert that this feature is also

supported by FIG. 7 and paragraphs [0074], [0119] and [0120] of the published specification. For example, as stated in paragraph [0119] of the published specification, "...MTCH can be also used instead of CTCH", and as stated in paragraph [0120] of the published specification, "[u]pon receiving the RLC PDU through CTCH, an MAC-c/sh 20 adds the m-RNTI ("*second identifier*") and UE ID to the RLC PDU and performs TCTF ("*first identifier*") multiplexing" (notations added). Thus, the second identifier ("m-RNTI") is only utilized when the MTCH is mapped onto the transport channel, similar to the first identifier as explained above.

As such, Applicants respectfully submit that claimed feature "the first identifier and second identifier are only utilized when the MTCH is mapped onto at least one transport channel" is fully supported by the original disclosure.

With regard to the rejection of independent claim 77, the Examiner asserted, on page 7 of the Final Office Action, that Beckmann discloses that the first identifier is a Target Channel Type Field (TCTF) in FIG. 2 and paragraph [0051] and LG discloses that the second identifier is a Multimedia Broadcast/Multicast Service Identifier in section 2.3. The cited section of LG discloses that a new RNTI could be added to MAC PDU as a header so that UE MAC could identify received MBMS data.

Further, the Examiner asserted, on page 7 of the Final Office Action, that 3GPP discloses that the MBMS identifier is configured by a Radio Resource Control (RRC) layer at page 23, citing CMAC-CONFIG-Req. However, 3GPP fails to disclose an MBMS identifier because 3GPP merely discloses that the CMAC-CONFIG-Req is used to request for setup, release and configuration of a logical channel, e.g. RNTI allocation, switching the connection between logical channels and transport channels, TFCS update or scheduling priority of logical channel. Therefore, the cited combination of references fails to disclose or suggest that the second identifier is a Multimedia Broadcast/Multicast Service (MBMS) identifier configured by a Radio Resource Control (RRC) layer, as recited in independent claim 77.

Furthermore, the Examiner admitted, on page 5 of the Final Office Action, that Beckmann and LG are silent on the MTCH mapped onto at least one transport channel. The Examiner asserted that Sarkkinen discloses this feature in paragraph [0046]. The cited paragraph of Sarkkinen discloses a first logical channel and a second logical channel, and that the MAC layer is coupled to the RLS layer by the second logical channel which is identified between the

MAC layer and the UM RLC layer and is known as “the Multicast Traffic Channel” (MTCH). However, no transport channel is disclosed in the cited paragraph of Sarkkinen.

In view of the above discussion, it is respectfully submitted that even if the cited references are combined, they fail to disclose or suggest that the first identifier is a Target Channel Type Field (TCTF) and the second identifier is a Multimedia Broadcast/Multicast Service (MBMS) identifier configured by a Radio Resource Control (RRC) layer, and the first identifier and the second identifier are only utilized when the MTCH is mapped onto at least one transport channel, as recited in independent claim 77.

Accordingly, it is respectfully asserted that independent claims 77 and 86 are allowable over the cited combination of references. It is further respectfully asserted that claims 80-82, which depend from independent claim 77, and claims 89-91, which depend from independent claim 86, also are allowable at least by virtue of their dependency from their respective allowable base claims.

CONCLUSION

In view of the above remarks, Applicants submit that the currently pending claims of the present application are in condition for allowance. Reconsideration of the application is requested.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned agent at the Los Angeles, California telephone number (213) 623-2221 to discuss the steps necessary for placing the application in condition for allowance.

Customer No. 035884

Date: June 4, 2010

Respectfully submitted,

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Enclosure: Claims Correspondence Table